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09/719,256	12/07/2000	Peter Leslie Hart	BKR-21102/01	5947

7590 05/29/2003  
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EXAMINER

ADDIE, RAYMOND W

ART UNIT PAPER NUMBER

3671

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/719,256

Applicant(s)

HART, PETER LESLIE

Examiner

Raymond W. Addie

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

1. The request filed on 5/13/2003 for a Request for Continued Examination (RCE) under 37 CFR 1.14 based on parent Application No. 09719256 is acceptable and an RCE has been established. An action on the RCE follows.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. # 5,051,023 in view of Barth et al. # 5,797,698.

Yoshida et al. discloses a paving block for use in roadway construction.

Said paving block comprising:

An upper and lower surfaces (5, 1).]

A plurality of lateral faces (1<sub>1</sub>, 1<sub>2</sub>) extending between said upper & lower surfaces.

Said lateral faces being tapered along an entirety of an upper edge (3).

Said tapering may alternatively be inclined or rounded edges, in the order of zero to a few millimeters, or 0-60°.

Said paving block, when in use/contact with other, similar paving blocks; form

upwardly opening gullies (2). See Figs. 2A, 2B; Col. 2, line 55-cols. 3, line 33.

What Yoshida et al. does not disclose is providing vertical drainage slots in said lateral faces ( $l_1$ ,  $l_2$ ). However, Barth et al. teaches a concrete paving stone having a plurality of recesses (10a-10d) extending between an upper and lower surfaces of said paving stone, said recesses having rectangular cross-sections, such that said width of the recess is greater than its depth.

When in use, said paving stone contacts lateral faces of similar paving stones, to form vertically oriented, shallow recesses, for surface water drainage below the paved so formed paved surface. See Barth et al., Figs. 19, 27, 44, 45, 49-51; Col. 1-2, Col. 3, In.16-col. 4, In. 12. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the paving stone of Yoshida et al. with shallow, vertically oriented drainage slots, as taught by Barth et al., in order to permit surface water to drain below the paved surface. As clearly taught by Barth et al.

In regards to Claim 2, Yoshida et al. discloses the portion ( $l_6$ ) of said lateral faces ( $l_1$ ,  $l_2$ ), which is tapered, extends over 10-80% of the entire height of lateral faces ( $l_1$ ,  $l_2$ ). See Col. 3, lines 1-33.

In regards to Claims 4, 6, 7 both Yoshida et al. and Barth et al. disclose a paving block made of cement, which is impermeable when cured. Further, Barth et al. teaches providing at least one shallow, vertically oriented drainage channel (10d) on each lateral face and that the depth of the channel may be varied, in order to provide a desired permeability. See col. 1, lines 10-30.

In regards to Claims 17-19 Yoshida et al. discloses the upper surface (5) of the block (1) has a beveled edge portion (4), at an angle between 0 and 60° with respect to the upper surface (5), around its periphery, at its common edge with said tapered portion (2) of said lateral surface. Said beveled edge portion being inclined with respect to said lateral surface at a greater angle than said tapered portion thereof. Yoshida et al. further discloses a horizontal shoulder (2), separating said tapered portion surface portion from said beveled edge portion. See Figs. 4A, 4B, 4C; Col. 3, lines 1-33.

3. Claims 8, 9, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers # 572,762 in view of Barth et al. '698.

Landers discloses a paving surface for the liquid spillage, comprising:

A permeable layer constructed at least partially of close fitting, without joint filling, of a

plurality of paving blocks (E) having an upper, lower surface and a plurality of lateral faces. Said blocks having a substantial portion (3), of at least two lateral surfaces, of the paving block, extending to the upper surface, being tapered along the entirety of the edge between the upper surface and the lateral face.

Wherein at least one of the lateral surfaces has a plurality of vertically oriented channels (5, 8) extending from the upper surface to the lower surface. Said channels being positioned as to form, when the block is placed in abutting contact with another, similar block, in use thereof, upwardly open gullies (4), formed by 2 facing channels (5-5, 8-8).

A supporting substrate layer (A), which is of particulate material, and provides drainage troughs (B) for receiving spilled liquids that have filtered through the permeable layer of vertically channeled paving blocks (E).

What Landers does not disclose is utilizing the paving block in outdoor applications. However, Barth et al., teaches a concrete paving block (2) for use in subsoil/subbase applications, such as roadways and sidewalks. Said subsoil being of particulate material having interstitial cavities for receiving rainwater that has filtered through a permeable layer consisting of said paving blocks (2). Barth et al. further discloses providing a paving stone comprising a plurality of vertically oriented channels (10d), having a rectangular cross-section, for permitting surface water to drain away from the paver surface, and towards the sub-grade.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the paving block of Landers, with shallow channels of varying sizes and shapes, as taught by Barth et al., in order to utilize the paving block in lawn-type paving applications. See Barth et al. col. 1, lines 10-30.

In regards to claims 9, 16 Landers discloses the permeable layer is formed substantially entirely by tapered, paving blocks (E) made from an impermeable material, such as cement.

4. Claims 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers in view of Barth et al. as applied to claim 8 above, and further in view of Jones et al. # 5,980,155.

Landers in view of Barth et al. discloses essentially all that is claimed, except for providing a filtering layer disposed between the permeable layer and the substrate layer. However, Jones et al. discloses a composite geosynthetic and method of use comprising: A dispersion layer disposed upon a filtering layer (see fig. 4c) for removal of pore pressure and the elimination of contaminants from a body of soil such as reinforced soil structures.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the paving surface of Landers in view of Barth et al. with a geosynthetic layer, as taught by Jones et al. in order to support a traffic surface upon a soft subgrade, as is found in lawn-paving applications. See Jones et al. Col. 1-2, col. 13, lines 30-36.

5. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers in view of Barth et al. as applied to claim 8 above, and further in view of Peggs # 5,788,413.

Landers in view of Barth et al. discloses essentially all that is claimed, except for providing a containment membrane of impermeable material. However, Peggs teaches a geocomposite membrane that is impermeable to water and oil. Said membrane comprising one or more dividing means (14) for dividing sections within the containment membrane, as well as, drainage means (13) for drainage of fluids within said membrane. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the paving surface of Landers in view of Barth et al., with a containment membrane, as taught by Peggs, in order to prevent oil or water from contaminating the soil adjacent a roadway or landfill. See Peggs col. 1, lines 5-13, col. 5, lines 52-col. 6, line 45.



***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 2, 4, 6-9, 11-19 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Addie whose telephone number is (703) 305-0135. The examiner can normally be reached on Mon-Fri from 6:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

  
**Thomas B. Will**  
**Supervisory Patent Examiner**  
**Group 3600**

**RWA**  
**5/23/2003**